

U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION/SITUATION REPORT  
Jones Road Vapor Intrusion - Removal Polrep  
Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region VI

**Subject:** POLREP #1  
Jones Road Vapor Intrusion  
06NK  
Houston, TX  
Latitude: 29.9414000 Longitude: -95.5856000

**To:** Ronnie Crossland, EPA R6

**From:** Greg Fife, OSC

**Date:** 8/1/2018

**Reporting Period:**

1. Introduction

1.1 Background

<b>Site Number:</b>	06NK	<b>Contract Number:</b>	
<b>D.O. Number:</b>		<b>Action Memo Date:</b>	
<b>Response Authority:</b>	CERCLA	<b>Response Type:</b>	Time-Critical
<b>Response Lead:</b>	EPA	<b>Incident Category:</b>	Removal Action
<b>NPL Status:</b>	NPL	<b>Operable Unit:</b>	
<b>Mobilization Date:</b>	5/14/2018	<b>Start Date:</b>	5/14/2018
<b>Demob Date:</b>		<b>Completion Date:</b>	
<b>CERCLIS ID:</b>		<b>RCRIS ID:</b>	
<b>ERNS No.:</b>		<b>State Notification:</b>	
<b>FPN#:</b>		<b>Reimbursable Account #:</b>	

1.1.1 Incident Category

Time Critical

1.1.2 Site Description

The Jones Road Ground Water Plume Superfund Site ("Site") is a ground water plume within the Chicot aquifer contaminated with dry cleaning fluids from the former Bell Dry Cleaners at 11600 Jones Road and other potential sources in northwest Harris County, Texas. The chlorinated solvents of concern are perchloroethylene (PCE), trichloroethylene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), and trans-1,2-dichloroethene (trans-1,2-DCE). The plume was originally detected in a public water supply well between Jones Road and Tower Oaks Boulevard. The May 2017 investigation of the building where the former dry cleaner was located showed sub-slab concentrations of PCE exceeding 4,000,000 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) and of TCE exceeding 640,000  $\mu\text{g}/\text{m}^3$ .

The EPA has conducted response actions to address the groundwater contamination resulting from the releases from the dry cleaners. There were at least 33 wells with contamination concentrations above the Maximum Contaminant Level (MCL) of 5 micrograms per liter ( $\mu\text{g}/\text{l}$ ). The actions included providing alternative water supply to the residents with the construction of a water main system and connecting homes to the system.

1.1.2.1 Location

11600 Jones Road  
Houston, Tx 77070

1.1.2.2 Description of Threat

PCE has been detected in the indoor air within the building and under the slab at 11600 Jones Road. The May 2017 sampling showed PCE concentrations in the parts of the building of 262, 269, 144, 161, and 208  $\mu\text{g}/\text{m}^3$ . These concentrations are well above the Agency for Toxic Substances and Disease Registry's (ATSDR) acute-duration Minimal Risk Level (MRL) for PCE of 41  $\mu\text{g}/\text{m}^3$ . The MRL is based on the daily exposure.

The sub-slab samples taken along with indoor air samples were found to have PCE concentrations of 4,310,000, 4,250,000, and 4,020,000, and 336,000  $\mu\text{g}/\text{m}^3$ .

Likewise, trichloroethylene has been detected in the indoor air within the building and under the slab at the building. The May 2017 sampling showed TCE concentrations in the parts of the building of 26.4, 25.4, 19.2, 17.0, and 15.5  $\mu\text{g}/\text{m}^3$ . These concentrations are well above the ATSDR's intermediate-duration

Minimal Risk Level (MRL) for TCE of 2.18 µg/m<sup>3</sup>.

PCE is a hazardous substance listed in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14) and 40 C.F.R. § 302.4. PCE is also known as tetrachloroethylene perchloroethene and perc. PCE is a manufactured chemical used in dry cleaning and metal degreasing. Exposure to very high concentrations of PCE can cause dizziness, headaches, sleepiness, confusion, nausea, difficulty in speaking and walking, unconsciousness, and death. The Department of Health and Human Services (DHHS) has determined that PCE may reasonably be anticipated to be a carcinogen. Spills and other practices at the former dry-cleaning facility and other potential sources lead to the contamination of the groundwater plume.

**Trichloroethylene is also hazardous substance listed in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), 40 C.F.R § 302.4. TCE is a manufactured chemical used in metal degreasing and a precursor for other chemicals. Exposure to moderate concentrations of TCE can cause dizziness, headaches, and sleepiness. Exposure to high concentration can cause changes to the rhythm of the heartbeat, liver and kidney damage, and coma and death. The Department of Health and Human Services (DHHS) has determined that TCE may reasonably be anticipated to be a carcinogen. Spills and other practices at the former dry-cleaning facility and other potential sources lead to the contamination of the groundwater plume.**

#### 1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

## 2. Current Activities

### 2.1 Operations Section

#### 2.1.1 Narrative

The proposed removal action involves the design and installation of a vapor intrusion mitigation (VIM) system. Several units will be installed in the separate parts of the building. There are options for the removal of the PCE and TCE in the indoor air, but the typical unit is a sub-slab depressurization unit with a connection of a blower or electrical fan to a suction pit or channel under the slab.

The ERRS has subcontracted the installation of the 4 VIM units in the 3 businesses.

#### 2.1.2 Response Actions to Date

#### 2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

#### 2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>

### 2.2 Planning Section

No information available at this time.

### 2.3 Logistics Section

No information available at this time.

### 2.4 Finance Section

No information available at this time.

### 2.5 Other Command Staff

No information available at this time.

## 3. Participating Entities

No information available at this time.

## 4. Personnel On Site

No information available at this time.

## 5. Definition of Terms

No information available at this time.

## 6. Additional sources of information

No information available at this time.

## 7. Situational Reference Materials

No information available at this time.